

*MN*

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/776,618	CHIU ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Le Nguyen	2174	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7/19/07 communication.
2. ☒ The allowed claim(s) is/are 15-21 and 23-33.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br/>Paper No./Mail Date <u>4/19/04</u></li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application</li> <li>6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date <u>9/28/07</u></li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
|--|---|

/Steven P. Sax/  
Steven P. Sax

***Examiner's Amendment and Reasons for Allowance***

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Pavel Pogodin on 9/28/07.

3. The application has been further amended as follows:

Claims 1-14, 22 and 34-42 have been cancelled.

Claim 15 has been amended to incorporate claim 22 as follows:

15. (Currently Amended) A system for creating a 3D visualization comprising: a node identifying circuit, routine, or application that accesses a tree data structure and identifies qualities of nodes within the tree data structure; a rectangle assigning circuit, routine, or application that assigns rectangular layouts to nodes within the tree data structure; a rectangle arranging circuit, routine, or application that arranges rectangular layouts into larger candidate rectangular layouts; a layout testing circuit, routine, or application that compares candidate rectangular layouts and selects a solution layout; and a media associating circuit, routine, or application that associates media with the solution layout to create a 3D visualization, wherein, if there are two candidate layouts with the least amount of empty space, the layout testing circuit, routine, or application

Art Unit: 2174

selects the candidate layout with the smallest circumference as the solution layout for that node.

Claim 24 has been amended as follows:

24. A system for creating a 3D visualization comprising: a node identifying circuit, routine, or application that accesses a tree data structure and identifies qualities of nodes within the tree data structure; a set creating circuit, routine, or application that creates sets with which layouts may be associated; a set associating circuit, routine, or application that associates one or more sets of layouts with a node of the tree data structure; a layout constructing circuit, routine, or application that creates rectangular layouts for the leaves of the tree data structure; a layout size comparing circuit, routine, or application that compares dimensions of a plurality of layouts; a horizontal layout combining circuit, routine, or application that combines two layouts horizontally; a vertical layout combining circuit, routine, or application that combines two layouts vertically; a layout testing circuit, routine, or application that compares candidate rectangular layouts and selects a solution layout; and a media associating circuit, routine, or application that associates media with the solution layout to create a 3D visualization, wherein, if there are two candidate layouts with the least amount of empty space, the layout testing circuit, routine, or application selects the candidate layout with the smallest circumference as the solution layout for that node.[[;]]

4. The following is an examiner's statement of reasons for allowance:

The prior art made of record fails to anticipate or make obvious the claimed invention. Specifically, the prior art fails to teach, in combination with the remaining elements:

a system for creating a 3D visualization layout wherein if there are two candidate layouts with the least amount of empty space, the layout testing circuit, routine, or application selects the candidate layout with the smallest circumference as the solution layout for that node as recited in claims 15 and 24.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Barg et al. (US 6,707,454 B1) teach systems and methods for visualizing multi-dimensional data in spreadsheets and other data structures.

Strasnick et al. (US 5,861,885) teach a method an apparatus for indicating selected objects by spotlight.

Nikolovska et al. (US 6,281,898 B1) teach a spatial browsing approach to multimedia information retrieval.

Pulley, IV et al. (US 6,222,557 B1) teach a navigation system and method for viewing a 3D data landscape.

Atkins (US 2005/0071783 A1) teaches a layout with the least amount of empty space (paragraph [0014]) so that graphical images may be placed efficiently with a minimal amount of empty space.

***Inquires***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Lê Nguyen whose telephone number is **(571) 272-4068**. The examiner can normally be reached on Monday - Friday from 7:00 am to 3:30 pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid, can be reached at (571) 272-4063.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Steven P. Sax/  
Steven P. Sax

lvn  
Patent Examiner  
September 28, 2007